


PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	ADG/21/12862	
1.3 Title of PCN	Implementation of ProBand & HIC for Acepack SMIT packaging	
1.4 Product Category	STGSB200M65DF2AG STPSC40H12-M2Y STTD6050H-12M2Y STTH60RQ06-M2Y STPSC60H12-M3Y STTN6050H-12M1Y STTH120RQ06-M2Y	
1.5 Issue date	2021-06-17	

2. PCN Team

2.1 Contact supplier	
2.1.1 Name	ROBERTSON HEATHER
2.1.2 Phone	+1 8475853058
2.1.3 Email	heather.robertson@st.com
2.2 Change responsibility	
2.2.1 Product Manager	Giuseppe BAZZANO
2.1.2 Marketing Manager	Angelo RAO
2.1.3 Quality Manager	Vincenzo MILITANO

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Materials	Any indirect material modifications for shipping products in dimensions, material, composition, orientation...	ST subcontractor in Philippines

4. Description of change

	Old	New
4.1 Description	Standard ACEPACK SMIT T&R Packaging	Standard ACEPACK SMIT T&R Packaging, with Protective Band (Model PB10956UC) and Humidity Indicator Card (Model 51060HIC125)
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	NO	

5. Reason / motivation for change

5.1 Motivation	In order to improve the packaging method for our ACEPAK SMIT products delivered in T&R, we're going to introduce an additional Protective Band for the reel and a Humidity Indicator Card (HIC) to provide a more secure packaging to the units (protective band) and tighter controls on the MSL requirements of the devices through a moisture/humidity level monitoring.
5.2 Customer Benefit	LOGISTICS IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	Internal codification and QA number
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7. Timing / schedule

7.1 Date of qualification results	2021-06-10
7.2 Intended start of delivery	2021-09-10
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation			
8.1 Description	12862 Qualification Plan ProBand & HIC.xlsx		
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date	2021-06-17

9. Attachments (additional documentations)	
12862 Public product.pdf 12862 PCN ProBand & HIC for Acepack SMIT packaging.pdf 12862 Qualification Plan ProBand & HIC.xlsx 12862 HIC and Proband info.pdf	

10. Affected parts		
10. 1 Current		10.2 New (if applicable)
10.1.1 Customer Part No	10.1.2 Supplier Part No	10.1.2 Supplier Part No
	STTH60RQ06-M2Y	

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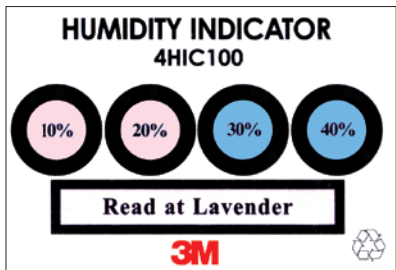
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3M™ Humidity Indicator Cards (HICs)

Humidity Indicator Cards (HICs) are printed with moisture sensitive spots which respond to various levels of humidity with a visible color change from blue to pink. The moisture sensitive spots are made of blotting paper impregnated with cobaltous chloride. The humidity inside dry packed barrier bags can be monitored by including an HIC inside. When the bag is opened, the card can be examined for proper dryness inside the bag.

3M™ Humidity Indicator Card 4HIC100
4-Spot Humidity Indicator Card

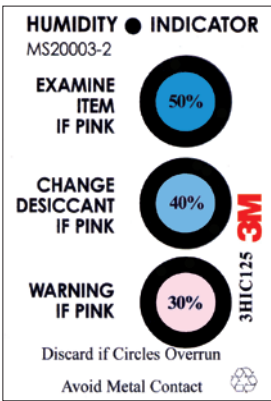
Card Size: 2" x 3"
Indicates: 10, 20, 30, 40%
Packing: 100 cards in an air-tight can



Part Number	Description
4HIC100	4-Spot Humidity Indicator Card 100/can
6HIC200	6-Spot Humidity Indicator Card 200/can
3HIC125	3-Spot Humidity Indicator Card 125/can

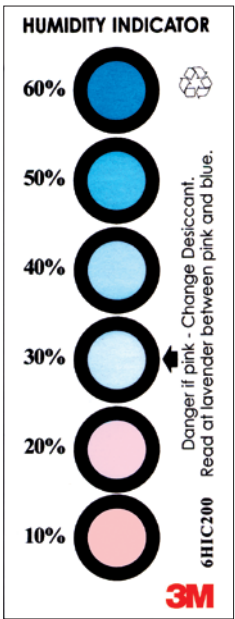
3M™ Humidity Indicator Card 3HIC125
3-Spot Humidity Indicator Card

Card Size: 2" x 3"
Indicates: 30, 40, 50%
Packing: 125 cards in an air-tight can
MS 20003-2 format



3M™ Humidity Indicator Card 6HIC200
6-Spot Humidity Indicator Card

Card Size: 1 9/16" x 4 3/4"
Indicates: 10, 20, 30, 40%
Packing: 200 cards in an air-tight can



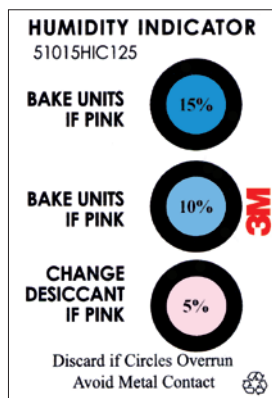
3M™ Humidity Indicator Cards (HICs)

3M™ Humidity Indicator Card 51015HIC125

Card Size: 2" x 3"

Indicates: 5, 10, 15%

Packing: 125 cards in an air-tight can



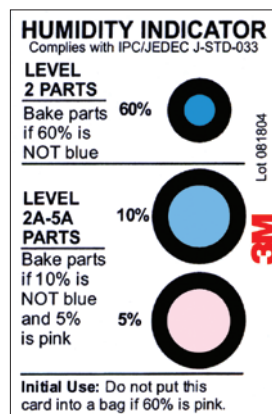
3M™ Humidity Indicator Card 51060HIC125

This card complies with IPC/ JEDEC J-STD-033C.

Card Size: 2" x 3"

Indicates: 5, 10, 60%

Packing: 125 cards in an air-tight can



Part Number	Description
51015HIC125	5,10,15-Spot Humidity Indicator Card 125/Can
51060HIC125	5,10, 60-Spot Humidity Indicator Card 125/Can

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BANDS

PROBAND™



Advantek PROBAND™ is a protective band made of carbon-loaded polystyrene designed to be wound around the diameter of standard size shipping reels of loaded carrier tape. The band covers the outermost wrap of carrier tape to provide added protection for packaged components. The bands are slightly wider than the carrier tape, preventing the flanges from crushing together during dry-pack or handling to protect packaged components from impact damages.

- Available in EIA standard carrier tape width from 8mm to 88mm
- Complete protection for devices when used with the Advantek LOKREEL® and LOKBAND®.
- Tighter-controlled SR version is available
- Available in lengths to fit standard size shipping reels

Shelf Life and Storage

We recommend that Advantek PROBAND™ be used within 5 years from the date of manufacture. Store this product in its original packaging in a climate-controlled environment where temperature ranges from 21°C +/- 17°C (70°F +/- 30°F). Allow the product to stabilize at room temperature prior to use. The mechanical integrity of the product is not affected by humidity.

Configurations

Advantek PROBAND™ is available in various lengths to navigate the circumference of standard diameter reels. The width of the PROBAND™ depends upon the width of the carrier tape used. The following table shows PROBAND™ part numbers with width and thickness for standard carrier width of between 8mm to 88mm. Custom width and thickness is available upon request.

PROBAND™ Part Numbers			
Part Number	Length(+/-0.03m) XXX:	Width(+0.7/-0.0mm) YY:	Thickness (+/-0.1mm)
PBXXYYUC	057=0.57m; 060=0.6m; 063=0.63m; 109=1.09m; 117=1.17m; 120=1.2m; 140=1.4m; 143=1.43m; 218=2.18m.	08=8.3; 12=12.3; 16=16.3; 24=24.3; 32=32.3; 44=44.3; 56=56.3	1.0
PBXXYYST			1.0
PB050XXYY			0.5
PBXXYYUCDBK			1.0
PBXXYYSTDBK		72=72.3 88=88.3	1.0
PB050XXYYDBK			0.5
PBXXYYUC		72=72.3 88=88.3	1.0
PBXXYYUCDBK			1.0

Note:

1. P/Ns with the suffix of 'ST' are only for Taiwan market.

PROBAND™ Material Properties

Property	Typical Value	Test Method/Standard
Surface Resistivity Surface Resistance	<10 ¹² ≥10 ⁵ ohms/square DBK suffix: <10 ⁸ ≥10 ⁴ Ohms.	ASTM D-257 ANSI/ESD STM11.13
Tensile Strength	3700 PSI	ASTM D-882
Elongation	40%	ASTM D-882
Specific Gravity	1.06 g/cc	ASTM D-792
Shelf Life	5 years	N/A
Color	Black	N/A

Note: The values presented for this product are typical laboratory data and may be changed without notice.



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Surftape®	Bare Die				Micro Thin			
Cover Tapes	Heat Activated				Pressure Sensitive			
Packaging Reels	Jumbo™	Ultra™	Pro™	Lite™	Trimline™	Mini		
Barrier Bags	DRYLOK®				STATLOK®			
Bands	PROBAND®				LOKBAND®			
Humidity Indicator Cards	1 Spot		3 Spot		4 Spot		6 Spot	
Desiccant	1/6 Unit	1/3 Unit	1/2 Unit	1 Unit	2 Unit	4 Unit	8 Unit	

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Discrete & Filter Division
Thyristor Triac and Rectifiers Business Unit
Process Change Notification

Implementation of ProBand & HIC for Acepack SMIT packaging

**Involved Products: STGSB200M65DF2AG
STPSC40H12-M2Y / STTD6050H-12M2Y / STTH60RQ06-M2Y
STPSC60H12-M3Y / STTN6050H-12M1Y / STTH120RQ06-M2Y**

Dear valued Customer,

In order to improve the packaging method for our ACEPAK SMIT products delivered in T&R, we're going to introduce an additional Protective Band for the reel and a Humidity Indicator Card (HIC) to provide a more secure packaging to the units (protective band) and tighter controls on the MSL requirements of the devices through a moisture/humidity level monitoring.

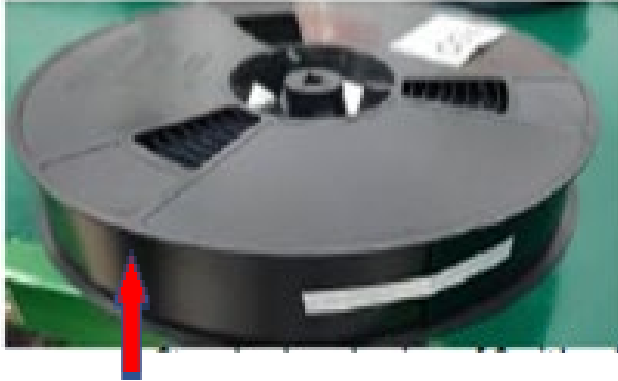
Change details:

Before:	After:
Standard ACEPACK SMIT T&R Packaging	Standard ACEPACK SMIT T&R Packaging, with Protective Band and Humidity Indicator Card Protective Band (Model PB10956UC) Humidity Indicator Card (Model 51060HIC125)

Standard Packaging



New Packaging



Protective band



Humidity Indicator Card

Qualification program and results availability:

The qualification plan and data brief are provided in attachment to this document.

Samples availability:

Samples of product with the new packaging method are available.

Change implementation schedule:

The new packaging method is expected to be implemented starting from week 36 /2021.

Marking and traceability:

Unless otherwise stated by customer specific requirements, the traceability of the change will be ensured by the standard tracecode.

Yours faithfully.



Public Products List

Public Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

PCN Title : Implementation of ProBand & HIC for Acepack SMIT packaging

PCN Reference : ADG/21/12862

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

STTD6050H-12M2Y	STTH60RQ06-M2Y	STGSB200M65DF2AG
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